IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for manufacturing ceramic hollow fibers from nanoscale powders, the method comprising:

manufacturing a ceramic mass by transforming a nanoscale metal oxide, carbide, nitride or sulfide powder with an oxycarboxylic acid, compounded to the ceramic mass with at least one solvent and ~~at least one~~an acrylate and/or methacrylate as a polymeric binder, the metal ~~axial~~oxide, carbide, nitride, or sulfide powder having a particle size of between 1 and ~~300~~ 50 nm and the ceramic mass having a solid content of at least 30 vol%;

adding to the ceramic mass a carbon based organic or inorganic component as a sacrificial material in amount between 5 and 20 wt%;

extruding or spinning the ceramic mass to hollow fiber blanks; ~~and~~

polymerizing the acrylate and/or metacrylate binder by using a radial starter; and

sintering the blanks to form fibers having an external diameter <200 μm and a pore size of between 0.5 and 20 nm.

2. (Cancelled)

3. (Previously Presented) The method according to claim 1wherein the nanoscale powder is aluminum oxide, zirconium oxide, yttrium stabilized zirconium oxide, titanium oxide, silicon carbide, tungsten carbide and/or silicon nitride.

4. (Previously Presente) The method according to claim 1wherein the oxycarboxylic acid is selected from a group consisting of trioxadecanoic acid and dioctaheptanoic acid.

5. (Currently Amended) The method according to claim 1wherein the solvent is selected from a group consisting of water//,// ethyleneglycol, propyleneglycol, diethyleneglycolmonoethylether, diethyleneglycolmonobutylether, and a mixture of ethyleneglycol and diethyleneglycolmonobutylether.

6. (Previously Presented) The method according to claim 1wherein as polymer binder, a cellulose, methylcellulose, ethylcellulose, polyvinylalcohol, ambergum, a polyacrylate and/or polymethacrylate is utilized.

Claims 7-8 (Cancelled).

9. (Currently Amended) The method according to claim 1wherein before extruding the ceramic mass is placed in ~~a special container or in~~ a pressure vessel of a spinning device and conveyed through the spinning device between room temperature and 300 °C.

Claims 10-14 (Cancelled).

15. (Previously Presented) The method according to claim 1 further comprising forming the ceramic hollow fibers into a web shape before sintering, said web retaining shape after sintering.

16. (Previously Presented) The method according to claim 1 further comprising forming the ceramic hollow fibers into one of a group consisting of matrix reinforcements//// for artificial organs, components in microsystems for optical waveguides, ceramic membranes//// for the solid electrolyte in fuel cells (SOFC) or tissue engineering and light weight ceramic parts for temperature stressed components such as heat shields and brake systems, before sintering.

Claims 17-18 (Cancelled).

19. (New) A method for manufacturing porous ceramic hollow fibers from nanoscale, the method comprising:

manufacturing a ceramic mass by transforming a nanoscale metal oxide, carbide, nitride, or sulfide powder with an oxycarboxylic acid, compounded to the ceramic mass with at least one solvent and at least an acrylate and/or methacrylate as a polymeric binder, the metal

oxide, carbide, nitride, or sulfide powder having a particle size of between 1 and 50 nm, and the ceramic mass having a solids content of at least 30 vol%;

adding to the ceramic mass a carbon based organic or inorganic component as a sacrificial material in amounts between 5 and 20 wt%;

extruding or spinning the ceramic mass to hollow fiber blanks;

polymerizing the acrylate and/or methacrylate binder by using a radical starter; and

sintering the blanks to form fibers having an external diameter <100 μm and a pore size of between 0.5 and 5 nm.